CONTINENTAL CONTROLS CORPORATION

– A VALVE YOU CAN TRUST –

ECV5

EMISSIONS CONTROL VALVE

BENEFITS

- Advanced air-fuel ratio controls for stoichiometric and lean-burn engines
- Enables improved starting and operational stability
- Accurate closed-loop air-fuel ratio for the lowest engine emissions
- Maintains emissions compliance across changes in speed and load
- Precise valve control ensures consistent performance in all environments
- Excellent for varying gas BTU or for applications such as landfills
- Designed for flexibility across multiple applications
- Eliminates all mechanical fuel valves and regulators
- Full authority fuel control valve
- Servo valve with integrated pressure and position sensors
- Fail-safe spring-loaded closed
- Electrically actuated (voice-coil) valve delivers full stroke in less than 50 ms
- Modbus RTU over RS-232, (proprietary) CAN bus
- Onboard diagnostics and optional display

ADVANCED AIR-FUEL RATIO CONTROL FOR GAS ENGINES

Continental Controls Corp. offers a complete system that keeps all gas engines compliant with the most stringent local, state, and federal emissions regulations, while preserving peak operating efficiency.

The ECV5 is the culmination of years of development of an advanced gas valve with a high-level mechanical design and sophisticated electronics with superior application-specific software. The seamless integration of these design aspects into a single product has helped establish the ECV5 as the leading controller for reducing emissions for gas engines. Unlike many of the valves used in competing emissions control systems, the ECV5 has been specifically designed for reciprocating engines using gaseous fuels.

The ECV5 is a single stage, electronically actuated, balanced poppet fuel valve designed to act as an actuation device that can be used as an air-fuel ratio control valve or a variable pressure electronic regulator in a variety of applications.



ECV5
EMISSIONS CONTROL VALVE

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ECV5 SPECIFICATIONS

Maximum fuel flow capacity:	400 SCFM (1,120 lbs/hr) at 35 psig standard natural gas supply
Fuel:	Natural gas, propane, ethane, biogas, and other gaseous hydrocarbons
Maximum operating pressure:	150 psig
Filtration requirement:	10–20 micron absolute
Operating temperature:	-40°C (-40°F) to +90°C (+194°F)
Response time:	< 50 ms (10–90% stroke)
Flow accuracy:	±3.0% of reading or 0.5% of full scale
Demand input signal [to fuel control valve]:	0–5 V (O_2 sensor feedback) 4–20 mA load command (optional mapping), proprietary CAN bus
Feedback signal [from fuel control valve]:	4–20 mA position feedback, proprietary CAN bus
Power input:	19–30 VDC, 5.0 A max
Electrical interface:	MS connector (D38999/20FE99PN)
Data communication interface:	Modbus RTU over RS-232, proprietary CAN bus
Wetted materials:	6061-T6 anodized aluminum, 300 series stainless steel, Viton® seals, nitrile seals
Flanges:	2" ANSI Class 150 flange, 4-bolt (ASME B16.5, ASTM A182)
Dimensions:	6.0"L x 12.2"H x 6.0"W
Approximate weight:	17.2 lbs
Patent No.	US 6,978,774 B2
Environmental protection:	IP66 rating (when connected to electrical interface)
Certification:	C US Class I, Div 2, Group D: T4

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ISO 9001 CERTIFIED